

from 60 to 5% by weight of a non-fossil solid fuel including urban solid waste, and at least a further component selected from the group consisting of elastomeric polymer materials, non-elastomeric polymer materials and mixtures thereof,

wherein at least 90% by weight of the fuel composition fed into a burner is combusted in less than 10 seconds.

A¹
Sub C1

2. (Amended) Composition according to Claim 1, in which the amount of said fossil fuel is between 50 and 90% by weight.

Sub C2

4. (Amended) Composition according to Claim 1, in which the amount of said fossil fuel is between 60 and 80% by weight.

Sub C3

6. (Amended) Composition according to Claim 1, in which the fossil fuel is selected from the group consisting of methane, fuel oil, fossil coal dust, and mixtures thereof.

Sub C4

9. (Amended) Compositions according to Claim 1, in which the non-fossil solid fuel has an apparent density equal to or less than 0.6g/cm³.

10. (Amended) A fuel composition, comprising:

from 40 to 95% by weight of a fossil fuel; and

from 60 to 5% by weight of particles less than 1 mesh in size of a non-fossil solid fuel including urban solid waste, and at least a further component selected from the

group consisting of elastomeric polymer materials, non-elastomeric polymer materials, and mixtures thereof,

wherein at least 90% by weight of the fuel composition fed into a burner is combusted in less than 10 seconds.

Sub C7 11. (Amended) Composition according to Claim 10, in which at least 90% by weight of the particles are smaller than 2 mesh in size.

12. (Amended) Composition according to Claim 10, in which at least 50% by weight of the particles are smaller than 4 mesh in size.

13. (Amended) Composition according to Claim 10, in which the particles comprise non-elastomeric polymer material of less than 5 mm in size.

14. (Amended) Composition according to Claim 10, in which the amount of said fossil fuel is between 50 and 90% by weight.

15. (Amended) Composition according to Claim 10, in which the amount of said non-fossil solid fuel is between 50 and 10% by weight.

16. (Amended) Composition according to Claim 10, in which the amount of said fossil fuel is between 60 and 80% by weight.

LAW OFFICES

FINNEGAN, HENDERSON,
FARABOW, GARRETT,
& DUNNER, L.L.P.
1300 I STREET, N. W.
WASHINGTON, DC 20005
202-408-4000

Sub C7
cont.

17. (Amended) Composition according to Claim 10, in which the amount of said non-fossil solid fuel is between 40 and 20% by weight.

Sub A4

18. (Amended) Composition according to Claim 10, in which the fossil fuel is selected from a group consisting of methane, fuel oil, fossil coal dust, and mixtures thereof.

1007089-02200

Sub C8

23. (Amended) A combustion method comprising the steps of:
feeding the flame of a burner of an instantaneous-combustion boiler with a flow of fuel composition including:
from 40 to 95% by weight of an instantaneously combusting fossil fuel;
and
from 60 to 5% by weight of a non-fossil solid fuel selected from the group consisting of urban solid waste, elastomeric polymer materials, non-elastomeric polymer materials, and mixtures thereof, which has been suitably treated so as to be instantaneously combustible;
combusting at least 90% by weight of said fuel composition fed into the burner in less than 10 seconds.

Sub A5

Sub C10

25. (Amended) Combustion method according to Claim 24, in which at least 90% by weight of said particles are less than 2 mesh in size.

Sub C10
cont.

26. (Amended) Combustion method according to Claim 24, in which at least 50% by weight of said particles are less than 4 mesh in size.

27. (Amended) Combustion method according to Claim 23, in which said particles comprise elastomeric polymer particles of less than 5 mm in size.

28. (Amended) Combustion method according to Claim 23, in which the instantaneously combusting fossil fuel is selected from a group consisting of methane, fuel oil, fossil coal dust, and mixtures thereof.

34. (Amended) A combustion method comprising the steps of:
feeding a fuel composition into a zone of a boiler, said zone having a predetermined temperature value and said fuel composition including:

at least one instantaneously combusting fossil fuel, and

at least one instantaneously combusting non-fossil fuel selected from the group consisting of urban solid waste, elastomeric polymer materials, non-elastomeric polymer materials, and mixtures thereof;

combusting said fuel composition in said boiler, and

generating an amount of heavy ash from said combustion step,

wherein said predetermined temperature value is selected so that non-combusted materials are contained in said amount of heavy ash in an amount of less than 50% by weight.

Sub C.11

35 (Amended) Combustion method according to Claim 34, in which said zone of the boiler into which said non-fossil fuel is fed has a temperature of not less than 1500°C.

36. (Amended) A combustion method comprising the steps of:

feeding a boiler with a fuel composition including:

an instantaneously combusting fossil fuel, and

an instantaneously combusting non-fossil fuel selected from the group consisting of urban solid waste, elastomeric polymer materials, non-elastomeric polymer materials, and mixtures thereof,

combusting said fuel composition in said boiler,

generating an amount of heavy ash from said combustion step,

wherein said non-fossil fuel has a predetermined particle size so that non-combusted materials are contained in said amount of heavy ash in an amount of less than 50% by weight.

37. (Amended) A plant for combusting a fuel composition comprising at least one instantaneously combusting fossil fuel, and at least one instantaneously combusting non-fossil fuel selected from the group consisting of urban solid waste, elastomeric polymer materials, non-elastomeric polymer materials, and mixtures thereof, said plant comprising:

a boiler having at least one burner,

EN^g A₇
a system for supplying said at least one burner with a flow of said at least one instantaneously combusting fossil fuel carried by a carrier fluid, and

a system for feeding said at least one instantaneously combusting non-fossil solid fuel into said flow.

✓
Please add new claim 43:

10077889-022002 A⁸
--43. A plant for combusting a fuel composition comprising at least one instantaneously combusting fossil fuel, and at least one instantaneously combusting non-fossil fuel selected from the group consisting of urban solid waste, elastomeric polymer materials, non-elastomeric polymer materials, and mixtures thereof, said plant comprising:

a boiler comprising at least one burner and at least one fire area,

a system for supplying the fire area of said boiler with a flow of said at least one instantaneously combusting fossil fuel carried by a carrier fluid, and

a system for conveying said at least one instantaneously combusting non-fossil fuel into the fire area of said boiler.--

REMARKS

Claims 1-6, 9-18, 23-28, 34-37, and 43 remain for consideration.